Reviewer’s report

Title: The effect of cognitive-motor dual-task training on cognitive function and plasma amyloid beta peptide 42/40 ratio in healthy elderly persons: a randomized controlled trial

Version: 2 Date: 14 December 2014

Reviewer: Leon Flicker

Reviewer’s report:

This is reported as a randomized trial of two exercise modalities. There are differences ascribed to dual task training.

Major Compulsory Revisions
1. Please describe fully the randomization procedure. How performed, block size etc
2. Please include in Table 1 baseline cognitive scores and whether these are different between groups – the difference in BMI between groups looks large.
3. This study appears to be completely unblinded. The participants knew which group they were in because they did the exercises. Were the raters and research assistants blinded or unblinded?
4. Please provide intra-assay and inter-assay CVs for abeta 40 and 42 for your laboratory. Were the specimens batched? If so how? Or were the assays done as presented.

Minor Essential Revisions
1. Introduction line 10
   These are not “mega-trials” but observational studies
2. Introduction page 5 line 14 on the levels in plasma of ABeta 40 and 42 these have not been elucidated clearly in various stages of disease

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests